

Contents

Introduction	6
What is DBRS?	6
About This User Guide	6
What's New in DBRS	6
System Requirements	7
Supported Browsers	7
Recommendations for Best Performance	7
Getting Started	8
Accessing DBRS	8
Logging Out	8
Getting Help	8
Quick Start Guide to Generating a Report	10
DBRS Basics	11
Navigation Links	11
Processing Requests	12
Huge Dataset Return Warning	13
Available Reports Page	14
Reports List	14
Map Icon	14
New Report Icon	14
Viewing Report Categories and Subcategories	15
Report Page	16
Query Parameters Section	16
Map Component Section	16
Result Set Section	16
Query Parameters	18
Required Parameters	18
Selecting Query Parameters	18
Result Set	19
Running the Report	19
Resetting the Form	

	Selecting Field Names	.19
	Sorting Fields	.19
Т	ips on Entering Criteria	. 20
	Text Boxes	. 20
	Wild Card Search	. 20
	List Boxes	.21
	Date Ranges	.22
	MTR (Meridian, Township, Range)	.23
	Map Navigation Auto-Fill	. 25
	Dependencies	.25
S	patial Queries	. 26
	About the Integration of DBRS and Map Component	.26
	An Overview of Querying in Map Component	
	Map Drawing Tools	
	Print the Map Tool	.33
	Copy or Paste Features Tool	.34
	Feature Information Tool	.35
	Map Navigation Tool	.35
	Map Buffer	. 38
	Repositioning and Resizing the Map Component Interface	. 39
	Map Views	.39
	Base Layer	. 39
	Overview Map	.40
	Using Multiple Areas of Interest in a Query	.41
R	eport Display Page	. 42
	Paging Options	.42
	Rows Per Page	.42
	Moving from Page to Page	.43
	Select Field Names	.43
	Sort Fields	.44
	Exporting the Report	.45
	Save to Excel	.45
	Save to PDF	.45
	Report Information	.45

Appendix A	About Townships and Sections	47
Viewing Feat	ures	.46
Smart Link	S	.46
Hyperlinks		.46
Special Links		.46

List of Figures

Figure 1 – Available Reports Help	9
Figure 2 – Report Help	9
Figure 3 – Navigation Links	11
Figure 4 – Processing Request	12
Figure 5 – Huge Dataset Return Warning	13
Figure 6 – Available Reports	14
Figure 7 – Viewing Report Categories and Subcategories	15
Figure 8 - Report	17
Figure 9 – Query Parameters Header Bar	18
Figure 10 – Example of a Text Box	20
Figure 11 – Example of a List Box	21
Figure 12 – Example of a Date Range Field and Calendar	22
Figure 13 - Examples of a Township Text Box and Section List Box	24
Figure 14 – Map Navigation Auto-Fill Functionality	25
Figure 15 – Query Parameter Dependency	25
Figure 16 - No Features Were Selected	29
Figure 17 - Draw Point Map Tool (Zoomed Out Too Far)	30
Figure 18 - Draw Point Map Tool (Zoomed In)	30
Figure 19 – Draw Line Map Tool	31
Figure 20 - Draw Polygon Map Tool	32
Figure 21 – Modify Feature Map Tool	33
Figure 22 – Print Map Parameters	34
Figure 23 – Copy/Paste Features Dialog	34
Figure 24 – Application Transfer List	35
Figure 25 – Feature Information Display	35
Figure 26 – Map Navigation Tool	36
Figure 27 – Map Navigation Tool <i>Draw</i>	38
Figure 28 – Map Navigation Tool <i>Use</i>	38
Figure 29 –Feature Selector Dialog	41
Figure 30 – Selecting Features using the Feature Selector Dialog	41
Figure 31 – Report Display Page	42
Figure 32 - Select Field Names	43
Figure 33 - Sort Fields	44
Figure 34 – Report Information	45

Introduction

What is DBRS?

The Alaska Department of Natural Resources (DNR) Business Reporting System (DBRS) is a web-based application that creates reports from databases maintained by the Information Resource Management Section and other divisions within DNR. The versatile user interface allows users to create precise queries and then flexibly navigate and sort the results. If desired, the results can be exported to a Microsoft Excel spreadsheet, saved as an Adobe PDF document or printed to a specified printer.

DBRS output can also be generated utilizing spatial techniques. Through integration with the "Map Component", users can navigate to an area of interest and perform spatial queries using a mapping interface. After map features have been selected, the selected items can then be viewed in the "Result Set" section.

After generating a report, interactive report features can be used to obtain additional information about particular items returned by the query. For example, when a case-file number appears in a report, it will normally provide a hyperlink to the appropriate case-file abstract found in the Land Administration System (LAS). Reports may also provide hyperlinks to the Alaska Land Records website when an MTRS designation is included in a report so that land records associated with that area can be found.

About This User Guide

This user guide serves as a reference to the features and functions of the DBRS.

What's New in DBRS

DBRS version 4.0 includes the following enhancements:

- > The user interface has been redesigned and updated with new formatting and increased width in accordance with new State of Alaska and DNR web page requirements/standards. The header and footer have been updated with current State of Alaska links and other usability improvements have also been made.
- > "Single Sign-On (SSO)" functionality that eliminates the need for users to enter their username and password when accessing the system on State computers has been added.
- > The login screen provides more-detailed messages when errors occur.
- ➤ The application times out and requires logging in again after 90 minutes of inactivity instead of only after 45 minutes.
- The "Please Wait" message has been replaced with a simpler version that is consistent across the application and more visible when executing a report.
- Some reports include required parameters that are now enforced and must be specified before the report can be run. If a required parameter is missing, an error message is displayed.
- Dependent parameters are indicated more clearly with an icon that can be hovered over to display what field the parameter is dependent on.
- > The "Map Component" section of the reports has been renamed "Map Component" and the following enhancements have been made:
 - Added ability to draw multiple features as well as modify drawn features on the map.

- Added map footer that displays a scale bar and the XY (latitude/longitude) coordinates of where the cursor is on the map.
- 'Map Navigation' tool has been moved from a sliding panel at the bottom of the map to a button on the top left of the map.
- 'Feature Information' tool has been added and allows users to view feature information (e.g. elevation, length or area) for individual points, lines or polygons drawn on the map.
- 'Copy or Paste Features' tool has been added and allows users to copy or paste an area of interest on the map for use between compatible applications.
- 'Print Map' tool has been added and allows users to save the current map view as an image file or PDF.
- 'Clear Features' tool has been enhanced for use with multiple features.
- The 'Previous View' and 'Next View' buttons have been moved under the zoom bar.
- ➤ The "Huge Dataset Return Warning" message now displays when the number of records returned is over 10,000 instead of 5,000. The maximum record limit has also been increased to 25,000.
- > The "Select Field Names" button has been added and allows users to specify the fields they want displayed on the report, as well as the order of the selected fields.
- > The "Sort Fields" button has been added and provides users with more advanced sorting options. Previously, sort order was limited to the ordering of the fields displayed in the report, but now any desired sort order can be specified.
- > The "Save to Excel" and "Save to PDF" options are disabled when more than 5,000 records are returned.
- > The 'User' field has been added to the Excel, PDF and Printable Report view and indicates the user ID of the user executing the report. The timestamp on these report views has also been corrected.
- > The paging options and field name header of the "Result Set" section now remains visible while scrolling through results.
- Hyperlinks in reports now display in separate windows instead of within the report.

System Requirements

Supported Browsers

DBRS is cross-browser compatible with commonly used browsers, including Microsoft Internet Explorer version 8.x and Mozilla Firefox version 6.x.

Recommendations for Best Performance

For best performance, we recommend that your system have the following:

- Screen resolution of at least 1024 x 768 pixels,
- Ability to display at least 24-bit color video, and
- Adobe Acrobat Reader browser plug-in.

Getting Started

Accessing DBRS

To access DBRS, direct your Web browser to http://reports.dnr.alaska.gov/DBRS.

You may then select one of the following options:

- **Enter Public Site** The public site is not yet available. At a future date, this link will provide access to reports that have been made available to the general public.
- Log in as State Employee Registered user accounts are available only to employees of the State of Alaska. All state employees automatically have a registered user account. The user ID and password are the same as those for your email account. If you are unable to log in, contact your local computer support personnel or the Department of Administration. The DNR is considering a policy that will permit non-state employees to have registered user accounts.

Logging Out

When finished with the application, you should log out by clicking the **Log Out** link found in the upper-right portion of the page. Logging out closes the current session and helps eliminate the chance of someone tampering with your account. DBRS will automatically close your session after 90 minutes of inactivity, requiring you to login again if you wish to continue using the application.

Getting Help

There are various ways you can get help with using DBRS:

- On the Available Reports page, hover your pointer over the report names to view tool tips that display descriptions of the reports if they are available. See Figure 1.
- On the Report page, click the help icon next to the report title to view the DNR Business Reporting System Form Help. This page explains how to enter and select parameters to generate a query that returns the desired report data. See Figure 2.
- On the Report page, hover your pointer over an information icon next to a report parameter to view explanations and tips for entering report criteria in fields such as text boxes, list boxes and date fields. See Figure 2.

Additional help is provided through two important links located at the bottom of all DBRS pages. These links are to **Support** and the **User Guide**. The **Support** page allows you to submit a request for help. If your issue concerns a particular report, please include the report ID and report name in your message. The **User Guide** link offers this guide in PDF format.

Figure 1 illustrates the ways you can obtain help on the Available Reports page. Figure 2 illustrates the ways you can obtain help on the Report page.

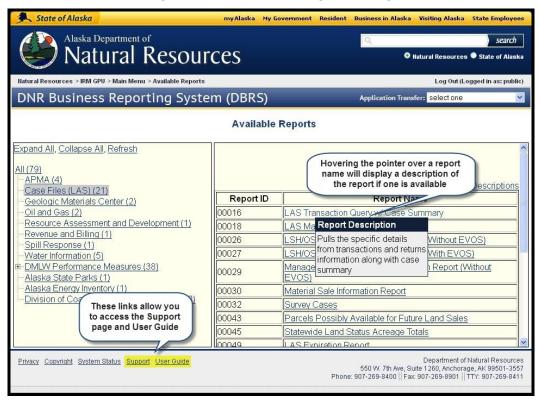
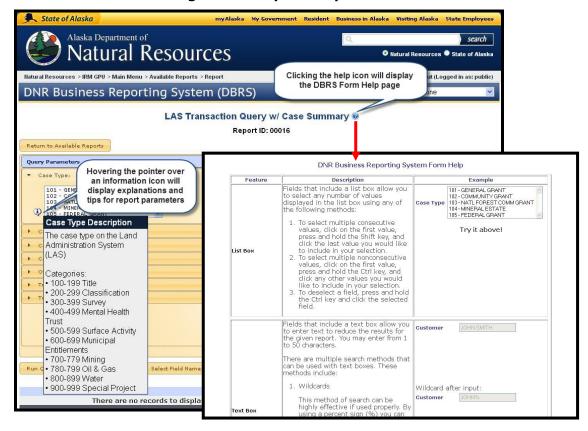


Figure 1 – Available Reports Help





Quick Start Guide to Generating a Report

Following is a high-level overview of what it takes to run a report in DBRS. For more specific information, refer to the sections that are referenced within these steps.

To run a report:

- 1. From the Available Reports page, select the category to which the report belongs from the left column. All reports belonging to that category display in the right column. See "Available Reports Page" on page 14 for more information.
- 2. Click the name of the report you wish to run. The "Query Parameters" section will then be displayed. See "Query Parameters" on page 18 for more information.
- 3. From the "Query Parameters" section, fine tune the report by specifying selection criteria. Each report has its own set of criteria. For tips on entering data in these fields, see "Tips on Entering Criteria" on page 20.
 - **Note:** A spatial query can be done for reports with map icons. See "Spatial Queries" on page 26 for more information.
- 4. Click **Run Query**. The system generates the report using the specified criteria and displays it on the bottom of the same page. See "Report Display Page" on page 42 for more information.
- 5. From the Report Display, organize the report by sorting the columns as you see fit. See "**Error! Reference source not found.**" on page 44 for more information.
- 6. If desired, export the report to an Excel spreadsheet, PDF file or print to specified printer. See "Exporting the Report" on page 45 for more information.

DBRS Basics

Navigation Links

Throughout the report generation process, DBRS provides navigation links (Figure 3), often called "breadcrumbs", that allow you to quickly return to previously visited pages. These links show a history of the pages that were visited prior to the current page. To return to a previously visited page, click the appropriate link in the breadcrumb trail. From the Report page, you can also click the "Return to Available Reports" button to return to the Available Reports page.

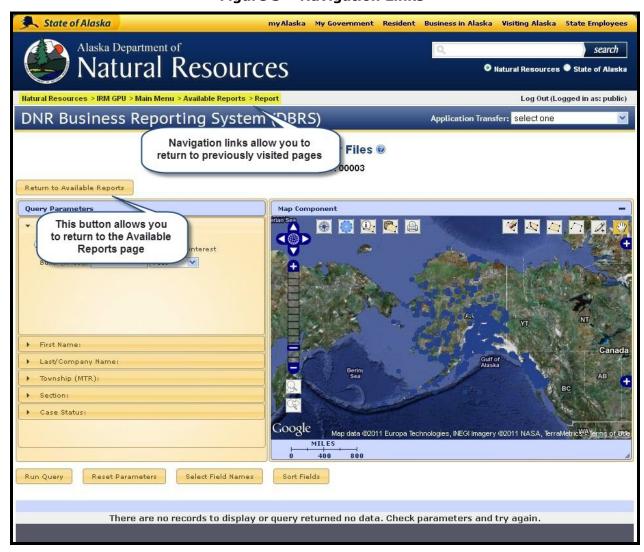


Figure 3 - Navigation Links

Note: For best performance, use these navigation links instead of your browser's **Back** button.

Processing Requests

Waiting for http://localhost:8080/DBRS/reports.

Whenever DBRS is processing a request, you will see the message in Figure 4.

AKDNR - DNR Business Reporting System (DBRS) - Windows Internet Explorer (C) (C) v (E) http://localhost:8080/DBRS/reports ✓ 😽 🗶 Google File Edit View Favorites Tools Help AKDNR - DNR Business Reporting System (DBRS) 🚹 🕶 🔝 = 👼 🕶 Page 🕶 🚳 Tools 🕶 The spinning icon indicates the system is search processing a request vatural Resources Log Out (Logged in as: public) The "Please wait..." message **DNR Business Reporting Syst** will display whenever DBRS plication Transfer: selections is processing a request Available Repo Please wait... (LAS) All (79) Geologic Materials Center (2)
Oil and Gas (2)
Resource Assessment and Development (1) **Show Descriptions** Report Name Report ID 00016 LAS Transaction Query w/ Case Summary 00018 Revenue and Billing (1) Spill Response (1)
Water Information (5) LSH/OSL Acreage Extraction Report (Without EVOS) MLW Performance Measures (38) 00029 Management Right Acreage Extraction Report (Without EVOS Alaska State Parks (1) Alaska Energy Inventory (1) Division of Coastal & Ocean Management (2) Material Sale Information Repor The status bar indicates 00043 relative progress of the request 00045

Figure 4 - Processing Request

When you see this page, please be patient, as some reports may take some time to load/execute.

00049

currently being processed

Local intranet

100%

[

Along with the "Please wait..." message in the center of the page, your browser may display a spinning icon to indicate that a request is being processed. Additionally, relative progress is indicated via the status bar at the bottom of the browser window. If it seems your request is not being processed, please check for these features. Depending on the current system load, DBRS may take a bit of time to process a request. If you do not see the spinning icon or status bar indicators and the "Please wait..." message does not seem to go away, try closing the browser window and reloading the application in a new window; if the problem persists, please submit a help request.

Note: The spinning icon and status bar may differ slightly among different browser versions.

Huge Dataset Return Warning

Whenever a report query has returned more than 10,000 records, you will see the warning in an error message as seen in Figure 5. If the report query returns more than 25,000 records, the option to continue will not be available.

my Alaska My Government Resident Business in Alaska Visiting Alaska State Employe State of Alaska Resources Hatural Resources > IRM GPU > Main Menu > Available Reports > Report Log Out (Logged in as: public) Application Transfer: select one DNR Business Reporting System (DBRS) List of Water Files @ Report ID: 00003 Ouerv Parameters Map Component Location on Map: Query will return 17,966 records. For optimal Use map at right to create the area of i performance, please limit queries to 10,000 records. Buffer (in feet): Click the "Cancel" button to refine your search now, or click the "Continue" button to run the report. Please note that if you choose to continue you may experience long wait times for the report to complete. Continue Cancel First Name Township (MTR)

Figure 5 - Huge Dataset Return Warning

This message cautions you to refine your search in order to receive a smaller, more manageable dataset. You can make the "Result Set" more manageable by selecting additional criteria or narrowing the range of your search.

There are no records to display or query returned no data. Check parameters and try again.

You have two options when a search returns such a large number of records:

- To return to the "Query Parameters" section, click Cancel.
- To run the report anyway, click Continue.

Run Query Reset Parameters Select Field Names Sort Fields

Note: If you choose to continue, you may experience long wait times for the report to complete.

Available Reports Page

The Available Reports page provides a categorized list of all available reports based on their functional use within DNR. Figure 6 summarizes the features explained in the following sections.

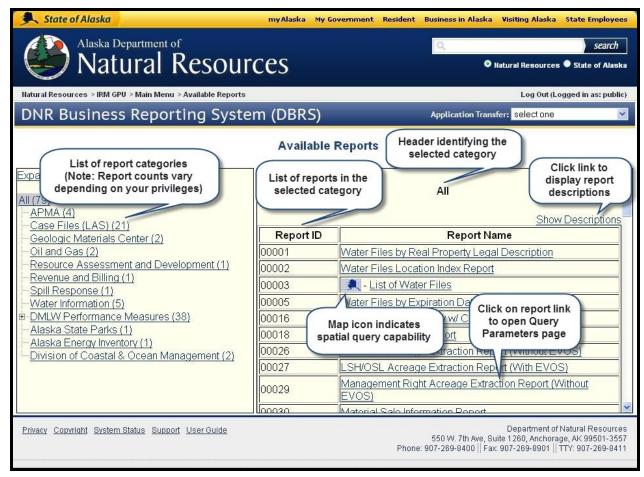


Figure 6 - Available Reports

Reports List

The list of reports displays two columns, **Report ID** and **Report Name**. Report names are displayed as hyperlinks. Clicking a report name will open the "Query Parameters" section, which is used to fine-tune the selection criteria that will be used to generate the report. For more information, see "Report Page" on page 16.

Tip: Click the **Show Descriptions** hyperlink above the report names to display a report description.

Map Icon

An Alaska map icon next to a report name signifies that the report offers spatial query capability. For details on this function, see "Spatial Queries" on page 26.

New Report Icon

The NEW! icon highlights reports added to the system within the last 60 days.

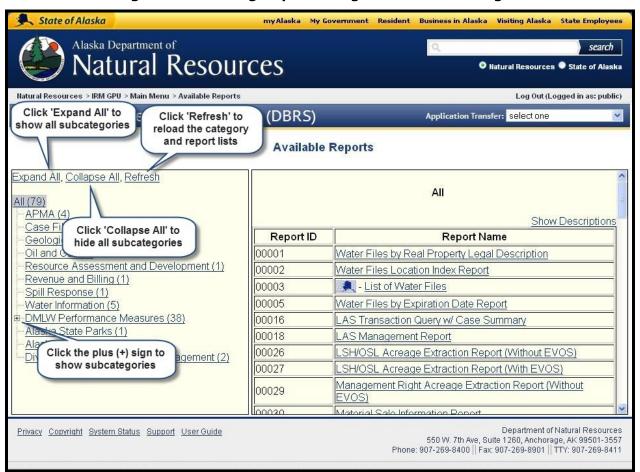
Viewing Report Categories and Subcategories

In the left column of the Available Reports page, you see a list of all categories to which you have access. Following are some tips on using this list:

- Some categories may be further divided into subcategories, which you can view by clicking the plus sign (+) to the left of the category name to *expand* the list.
- When a category is expanded, a minus sign (-) will appear next to its name. To hide the subcategories again, click the minus sign (-) to *collapse* the list.
- Click Expand All to show all report subcategories.
- Click Collapse All to collapse all nodes on the list and hide all report subcategories.
- Click Refresh to reload the category and report lists.

Figure 7 illustrates these options.

Figure 7 - Viewing Report Categories and Subcategories



Report Page

The Report page displays the fields that are used to create the report and allows you to specify criteria that narrow down the report results. It consists of three sections. See Figure 8 on the next page.

Query Parameters Section

The left panel is also known as the "Query Parameters" section. This section of the screen allows users to input search criteria (aka query parameters) by entering and selecting text. See "Query Parameters" on page 18 for details on how to manipulate the "Query Parameters" section.

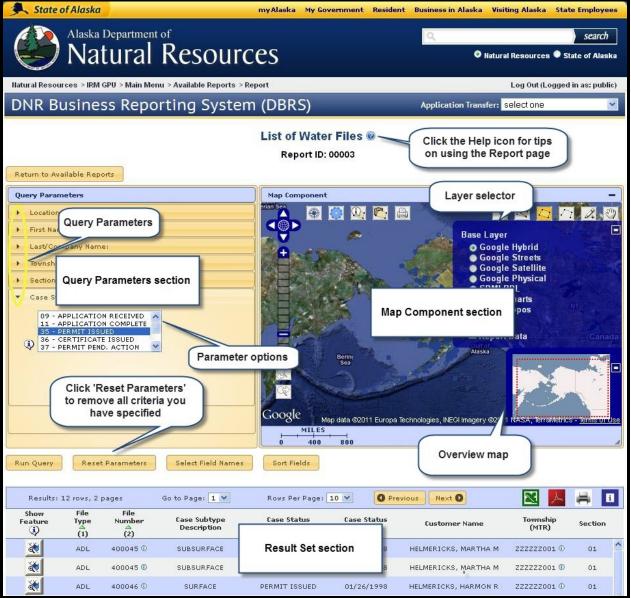
Map Component Section

The right panel is also known as the "Map Component" section. This section of the screen allows the user to input query parameters by using the interactive map tools. See "Spatial Queries" on page 26 for details on how to manipulate the "Map Component" section.

Result Set Section

The bottom panel is also known as the "Result Set" section. This section of the screen displays the results from the queries run. See "Result Set" on page 19 for details on how to manipulate the "Result Set" section.





Query Parameters

The "Query Parameters" section provides the user with the ability to enter and select criteria to refine the "Result Set". The layout of the "Query Parameter" section varies among the different reports, as each report has its own requirements.

Note: Some reports do not require you to enter criteria to refine search results. Whenever you select one of these reports from the list, the "Query Parameter" section will not display and instead you will be taken directly to the report results.

Required Parameters

The \odot icon beside a parameter name indicates that it is required. Reports cannot be run unless values are entered for these parameters.

Selecting Query Parameters

The "Query Parameters" for a report allow the user to target report results to specific criteria. Each of the headers under the "Query Parameters" section is expandable by clicking on the header menu bar to reveal available data that can be selected to narrow down search results. Once the criteria are identified the **Run Query** button will return the "Result Set" matching the criteria entered.

Note: As selections are made in the "Query Parameters" section, the items selected will appear next to the header bar for each query parameter. For example, by selecting "OIL AND GAS WELL" from the "Location Type" header bar the following displays.

Figure 9 – Query Parameters Header Bar

Location Type: OIL AND GAS WELL

Result Set

After the query is run, the bottom of the screen will display the "Result Set" of the query in tabular format. Each column within the "Result Set" that the data is sorted on will have a corresponding arrow (up and down) to indicate whether the column is sorted in ascending or descending order, as well as a number indicating the sort order of the columns. Additionally, the "Result Set" can be exported in Microsoft Excel or Adobe Acrobat (PDF). Each of the exports will open in a pop-up window as a file download allowing the user to open it in a separate screen or save the result as the respective file type. Selecting the Print icon will generate a report in a printer friendly format. Selecting the Information icon will provide report information, parameters, and the SQL statement used to generate the "Result Set".

Running the Report

Once you have entered the report criteria, click **Run Query** to submit your query. DBRS searches for matches to the requested information and displays the results. Please be patient, as it may take some time to retrieve the results.

Note: If more than 10,000 records are returned by your query, DBRS will warn you that the query may take a long time to complete and give you the option to either continue or cancel the query.

Resetting the Form

The **Reset Parameters** button returns the page to its default display. All information entered or selected in the "Query Parameters" section is erased.

Note: The **Reset Parameters** button clears all selections in "Query Parameters" and "Map Component".

Selecting Field Names

The **Select Field Names** button is for choosing fields to hide or display in the results. The field selector also allows you to specify the order of displayed fields. Initially the lists will populate based on fields default display status. The "Selected" list will show displayed fields, and the "Available" list shows the hidden fields. If you want to keep the default result display then run the query without using the field selector. See "Select Field Names" on page 43 for more information.

Sorting Fields

The **Sort Fields** button is used for changing the default sort order applied to report fields. Using the sort buttons you can select ascending, descending or no sort order. The list order is used to assign priority to the sorted fields that are to be sorted first. See "Sort Fields" on page 44 for more information.

Tips on Entering Criteria

The fields that you use to specify criteria on the "Query Parameters" section come in a variety of types. The following sections describe those field types and offer tips on how to use them.

Text Boxes

Fields that include a text box allow you to enter text to narrow down the report results. You may enter up to 50 characters in a text box. Text searches are not case sensitive. If you enter "JOHN" in a text field and there is a record "JOHN" for that field, this record will turn up in the report results.

You can either enter the exact text for which you are searching or use wildcards to broaden your search. Wildcards are explained in the following section.

Figure 10 - Example of a Text Box



Wild Card Search

The most important aspect of the text search method is the use of the wildcard percent character (%). This method of search can be highly effective if used properly. If you do not use a wildcard in your search text, only the records that are exact matches with your input text will be returned. However, the percent sign allows you to search for records that contain your input text at the beginning, end or anywhere else within the record.

If you place the percent sign after the input, the query will search the beginning of each record for your text. If you place the percent sign before the input, the query will search the end of the record for the text. If you place percent signs before and after the input text, the query will return records that contain the text anywhere within the field.

The following table illustrates how a wildcard search works:

Query Text	Result
JOHN (no wildcard)	 Search for records that contain only the word "JOHN". For example, the record "JOHNS" would not be returned.
• %JOHN	 Search for every record that ends with "JOHN".
• JOHN%	 Search for every record that begins with "JOHN".
• %JOHN%	 Search for every record that contains "JOHN". For example, "JOHN SMITH" and "MARK JOHN WALTERS" would be returned.
• JOHN%SMITH%	 Search for every record that begins with "JOHN" and contains "SMITH". For example, "JOHN DAVID SMITH" and "JOHN SMITH DAVID" would be returned, but "DAVID JOHN SMITH" would not.

Query Text	Result
• %JOHN%SMITH%	 Search for every record that contains both "JOHN" and "SMITH" in that order. For example, "JOHN DAVID SMITH" and "DAVID JOHN SMITH" would be returned, but "SMITH JOHN" would not.

List Boxes

List box fields allow you to search for one or more values by selecting them from a list of values.

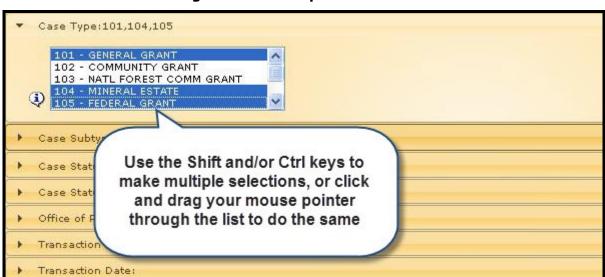


Figure 11 - Example of a List Box

Following are some tips on selecting values from a list box:

- To select multiple consecutive values, click on the first value, press and hold the **Shift** key and click the last value you would like to include in your selection.
- To select multiple consecutive values, click on a value and drag the mouse pointer through the list.
- To select multiple nonconsecutive values, click on the first value, press and hold the **Ctrl** key and click any other values you would like to include in your selection.
- To deselect a field, press and hold the **Ctrl** key and click the selected field.

Note: To see which value is currently selected hover the pointer over the icon at the bottom right of the list box.

Date Ranges

Figure 12 - Example of a Date Range Field and Calendar



Fields that include a date range allow you to specify a range of dates using a pop-up calendar, which will display when you click in one of these fields.

To select a date for the **From** or **To** field, click inside the calendar icon next to the date entry field and select the desired date from the calendar. Use the left (<) and right (>) arrows at the top of the calendar to navigate through months and years.

You can also change the year on the calendar using your keyboard. To do so, enter a date in the date entry field in MM/DD/YYYY format and hit the **Enter** or **Return** key. Selecting the **Run Query** button generates data in the "Result Set" section.

Following are some tips on entering dates:

- If you enter a date only in the **From** field on the left, the system returns results from that date to any date beyond (depending on how far the data extends in time).
- If you enter a date only in the **To** field on the right, the system returns results before that date.
- Enter the same date in both fields to return results only for that given day.
- If a date range is a required field, you must enter a date in both the From box and To box.

MTR (Meridian, Township, Range)

Townships (abbreviated as "MTR", which is short for "meridian/township/range") are 6x6-mile sections of land defined by DNR to identify exact plots of land at specific locations. The Township (MTR) field and the Section field should be considered a single unit of information. The section should be selected only if necessary. The township (MTR) designation has a standard format and works best if entered correctly at the outset. Note that DBRS can recognize slight deviations from the standard MTR format and translate them into the standard format. The list of acceptable patterns is described below:

Pattern	Description	
• F003N003W	Standard MTR format	
Foo3Noo3W	 Each letter "o" will get converted to a zero. 	
• F3N3W	 Numbers will get padded to 3 decimal places (3 becomes 003). 	
• F0030N0020W	 Numbers will be truncated to 3 digits (0030 becomes 030). 	
• F10030N10020W	 Numbers will be truncated to 3 digits (10030 becomes 030). 	



Figure 13 – Examples of a Township Text Box and Section List Box

Map Navigation Auto-Fill

When using the "Map Navigation" functionality, the DBRS will display a distinct set of criteria for each area of interest. These criteria are a searchable component for each area of interest. The selection criteria will consist of drop down boxes and data entry fields. Some data entry fields provide an auto-fill function that is initiated by the first three characters you type in (for example, you will see this functionality when you select the "Alaska Place Names" drop down item). If you are interested in Anchorage you can type in the first three letters (Anc) and the DBRS will match the letters entered to provide a pick list to choose from. The more letters you enter in the more exact the matches become, see Figure 14.

Alaska Place Name

And
Anchor Bay
Place Name
Anchor Cove
Anchor Cove
Anchor Island

Draw
Use
Clear

Figure 14 - Map Navigation Auto-Fill Functionality

Dependencies

Some reports have "Query Parameters" that are dependent on other parameters. Query parameters that are dependent on others are signified by a Θ icon next to the query parameter header bar. Hovering over the icon will display the name of the parameter that the selected parameter is dependent on.

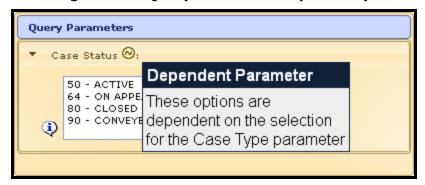


Figure 15 - Query Parameter Dependency

Spatial Queries

About the Integration of DBRS and Map Component

DBRS's integration with the "Map Component" allows you to execute a spatial query—a search of data that is organized according to its geographic location—using this powerful GIS interface presented in DBRS.

When you select a report category that contains an Alaska map icon in the Available Reports screen in DBRS, the "Map Component" will load and display the map that is appropriate for the type of report you have selected.

Note: When viewing map data with extensive data points the default map view will not show any feature points; this is so the map face is not congested visually. The features will display at a higher zoom level (use the zoom slider bar to zoom in).

The "Map Component" interface acts as the right side section of the screen while the "Query Parameters" and "Result Set" are, respectively, the left section and bottom section.

Using the "Map Component" map tools, you can make selections (based on the type of map tool you are using) to interact with and manipulate data directly on the map. All manipulation on the map can be used in conjunction with the "Query Parameters" section to narrow down your report "Result Set". This connectivity with the DBRS and "Map Component" is to enhance the user experience and interface so that dynamic spatial and tabular interactivity can take place on the map.

An Overview of Querying in Map Component

The "Map Component" interface provides several tools to manipulate and query the data on the map interface. The following table describes the "Map Component" tools and what they do.

Icon	Name	Description
	Previous View	Undoes a zoom in, zoom out, or panning of the map. This icon is grayed out whenever there is no previous view to which you can return.
	Next View	Redoes the view alteration that was just undone. This icon is grayed out whenever there is no next view to which you can return.
*	Map Navigation	Displays various navigation features, including latitude/longitude specification, selection of Alaska place names, and other predefined selection areas. See "Map Navigation Tool" on page 25.
	Feature Information	Displays feature information for points, lines or polygons drawn on the map. See "Feature Information Tool" on page 35

Icon	Name	Description
	Copy or Paste Features	Copies a selected area of interest on the map for use in a compatible application. After copying an area of interest, you can switch to a different application by selecting it from the Application Transfer dropdown in the upper-right corner of the page. You can then paste the area of interest. See "Copy or Paste Features Tool" on page 34.
	Print the Map	Saves the current map view as a document or image. See "Print the Map Tool" on page 33.
	Clear Features	Lets you remove a feature drawn on the map. See "Clear Features Map Tool page 33.
	Modify Feature	Lets you edit a feature drawn on the map. See "Modify Feature Map Tool" on page 32.
	Draw Polygon	Creates a many-sided area, selecting all the points inside it. Double-click the left mouse button to stop drawing.
	Draw Line	Creates one or more lines, selecting all the points within range of the line(s). Double-click the left mouse button to stop drawing.
2 +	Draw Point	Creates a point, selecting all the points within range of the point.
	Pan Map	Lets you click on the map and drag it around, altering the part of the map that is viewed.
	View Tools	These buttons alter how the map is viewed. Arrow buttons move the map in that direction. The circle in the middle of the arrows returns the map to the default view. The plus button zooms in, the minus button zooms out and the blue marker between the plus and minus buttons shows the level of zoom currently at and can be clicked and dragged to zoom in or out.
- click to expand; expanded view shown below:	Map View (top right) – Base Layer	This tab button exposes or hides the base map layer. Click the minus (-) button to collapse the screen.

Icon	Name	Description
Base Layer		
- click to expand; expanded view shown below:	Map View (lower right) – Overview Map	This tab button exposes or hides a map overview. Moving the rectangle changes the area displayed on the base map. Click the minus (-) button to collapse the screen.
	Show Feature	This button is shown in the "Result Set" section and when selected, the map will zoom to that specific feature.
-	Reset Window	The Minimize button in the upper right corner of the map window will return the map to its default size and place.
Map Component —	Map Component header bar	The map window can be made bigger, like any other window, and can be dragged to another spot on the screen.
MILES + 480 800 Latitude, Longitude: X, Y	Map Component footer bar	 A scale bar is displayed on the left. The XY (latitude/longitude) coordinates for the position of the mouse cursor on the map is displayed on the right. When the cursor is not over the map, the coordinates are hidden.

Map Drawing Tools

The map tools can be used in collaboration with the "Query Parameter" selections; using both provides a robust environment from which to work in.

Following are some hints and tips on using the map tools:

- Only one map tool can be used at a time.
- Once a map tool is selected it will highlight in orange.
 - This is how the Pan Map tool looks when it is not selected:



- This is how the Pan Map tool looks when it is selected:
- When you select a map tool, the pointer does not change to look like the map tool
- Select the **Run Query** button to view the "Result Set" of the map tool selections. If no selections are made and the Run Query button is clicked the following message will appear.

Figure 16 - No Features Were Selected





The **Pan Map** tool allows you to move the map view by clicking and dragging with the pointer. This tool also allows you to use the mouse scroll button to zoom in and out. The faster you scroll, the faster the map will zoom in or out. You can use the Previous View and **Next View** tools to move back and forth through previous zoom levels.



The **Draw Point** map tool is used to draw a single point on the map. When using this tool, make sure you are zoomed in sufficiently. If you are zoomed out too far, your point may be off the mark. Figure 17 and Figure 18 on the next page illustrate this.

Query Parameters

Location on Map:Selected

Use map at right to create the area of into Buffer (in feet): 100

Feet

OK

After clicking the "Run Query" button there are no results to display because no features were selected

Township (MTR):

Section:

Case Status:

Map Component

Sinnes:

No records were returned from this query.

OK

The Draw Point tool looks like it has selected a feature by drawing a circle around it

GOOGLE Map data ©2011 Europa Technologies, NEGI Inagery ©2011 NASA, TerraMetric W Terms of Use

NITLES

400

800

Figure 17 - Draw Point Map Tool (Zoomed Out Too Far)

Figure 18 - Draw Point Map Tool (Zoomed In)





The **Draw Line** map tool allows you to draw a line on the map. To begin drawing a line, click once on the map, and then move the pointer to draw. To create a corner, click once and then continue drawing. Double-click to complete the line. Figure 19 on the next page illustrates this.



Figure 19 - Draw Line Map Tool

It is difficult to see in the above figure but the orange line has a blue dotted line around it and is the default buffer.

Draw Polygon Map Tool



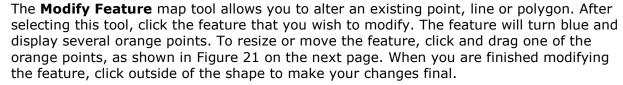
The **Draw Polygon** map tool allows you to draw a multi-sided shape on the map. To begin drawing, click once on the map, and then move the pointer to draw. To create a perimeter point, click once and then continue drawing. As you create perimeter points, the polygon forms like a rubber band snapping around the points. Double-click to complete the polygon. Figure 20 on the next page illustrates this.

Note: Using the **Draw Polygon** map tool from a zoomed out view may result in too many returned features in the guery results. To avoid this, zoom in closer on the map view.



Figure 20 - Draw Polygon Map Tool

Modify Feature Map Tool



Tip: To see how your feature modification has affected a previously run query, rerun the query by clicking **Run Query**.

Map Component The blue area is a drawn polygon which has been selected using the Modify Feature tool And The central orange point The orange points on the allows movement of the edges and corners allow drawn polygon resizing/reshaping of the drawn polygon Google Map data @2011 Google Imagery @2011 MILES

Figure 21 – Modify Feature Map Tool

Clear Features Map Tool



The **Clear Features** map tool allows you to clear selected features that you have drawn on the map using the map tools, such as points, lines, polygons and buffers. This tool does not clear features that have been selected by running a query. After selecting this tool, click the individual feature(s) you wish to remove.

Note: There is no **Undo** function for the **Clear Features** map tool. Once you clear the map features, they are lost permanently.

Print the Map Tool

The **Print the Map** tool allows you to save the map and drawn features that are currently displayed on the Map Component as an image or document.

To print the map:

- 1. Select a non-Google base map if one is not already selected.
- 2. Click the **Print the Map** icon.

Note: If a Google layer is selected then an error message will be displayed.

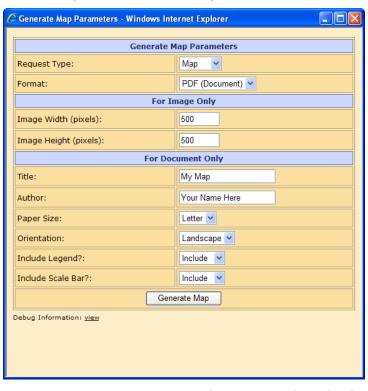


Figure 22 - Print Map Parameters

- 3. With the **Generate Map Parameters** window open, select the format type to use.
- 4. Make any changes to the options listed under the selected format.
- 5. Click **Generate Map**, and wait for a new window of the printed map to open.
- 6. Print or save the generated map.

Copy or Paste Features Tool

The **Copy or Paste Features** tool allows you to copy a selected area of interest on the map for use in a compatible application. After copying an area of interest, you can switch to a different application by selecting it from the Application Transfer dropdown in the upperright corner of the page. You can then paste the area of interest.

To copy and paste drawn features across applications:

1. Click the **Copy or Paste Features** icon.



2. Click the **Copy AOI** button.

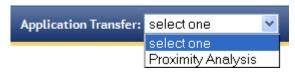
Note: If there are no features drawn on the map the button will be disabled.

Figure 23 - Copy/Paste Features Dialog



- 3. If the AOI was successfully copied, then the Paste AOI button will be enabled. The Copy / Paste Features window can now be closed.
- 4. Now use the Application Transfer list to select the application from the list that you want to use the copied AOI with. The browser will be redirected to the selected site.

Figure 24 - Application Transfer List



- 5. From this site, navigate to the map you want to use the AOI with.
- 6. Click the **Copy or Paste Features** icon.
- 7. Click on **Paste AOI** and the features from DBRS will be displayed in the current application.

When done, you can logout of the current application and return to DBRS.

Feature Information Tool

The Feature Information tool allows you to view information for points, lines or polygons drawn on the map. To use this tool only one feature can be drawn on the map.

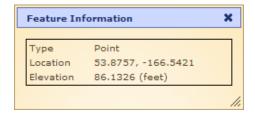
To display feature information:

- 1. Draw a feature on the map.
- 2. Click the **Feature Information** icon.

Note: An error message will display if no features or more than one feature are on the map.

- 3. Feature information will display in a new dialog.
- 4. If information for another feature is needed then you can erase the feature while still leaving open the feature information dialog box and it will update once a new feature is drawn.

Figure 25 - Feature Information Display



Map Navigation Tool

The **Map Navigation** tool allows you to quickly navigate to an area of interest on the map and use that area in a query if desired. The tool offers a variety of navigation options that allow you to jump directly to features such as Alaska place names, boroughs, municipalities, and latitude/longitude coordinates.

To navigate to an area of interest and use it in a query:

1. Click the Map Navigation icon.



2. Select a navigation option from the dropdown list in the Map Navigation window.

Figure 26 - Map Navigation Tool



Map Navigation Options

Navigation Option	Description
Latitude and Longitude Decimal (WGS84)	Enter a latitude and longitude and click the Draw button to navigate directly to those coordinates. Note: Latitude and Longitude accept up to five decimal places. Additionally, Longitude accepts negative numbers.
Latitude and Longitude DMS (WGS84)	Enter a latitude and longitude in Degrees Minutes Seconds format, and click the Draw button to navigate directly to those coordinates.
ADF&G Game Management Units	Select a game management unit from the dropdown list and click the Draw button to navigate to the unit.
ANCSA Corporation Boundaries	Select an ANCSA Boundary from the dropdown list and click the Draw button to navigate to the boundary.
Alaska Place Name	Enter a place name (e.g., "Juneau", "Kenai River" or "Knik Glacier") and click the Draw button to navigate to the location.
Borough/Municipality	Select a borough or municipality from the dropdown list and click Draw to navigate to it.
Coastal District	Select a coastal district from the dropdown list and click Draw to navigate to the coastal district.
DNR Case (File Type and Number)	Select a file type and enter part or all of a file number, then click the Go button to navigate directly to the case on the map.

Navigation Option	Description
DNR Recording District	Select a recording district from the dropdown list and click Draw to navigate to the recording district.
DOT Centerline Milepost	Select a route and a milepost from the dropdown lists, then click Draw to navigate to the specified location.
Election District (2002)	Select an election district from the dropdown list and click Draw to navigate to the election district.
Legislatively Designated Area (LDA)	Select a LDA name from the dropdown list and click Draw to navigate to the LDA.
PLSS Land – (MTRS)	Select a meridian, township, range, and section from the dropdown list, select a section number, then click the Draw button to navigate directly to a township.
National Geodetic Survey (NGS) monument	Enter the name of the NGS monument and click the Draw button to navigate directly to the location.
Rural Education Attendance Areas (REAA)	Select a REAA name from the dropdown list and click Draw to navigate to the REAA.
USGS 1:250,000 Topo Map Extent	Select a quadrangle name from the dropdown list and click Draw to navigate to the specified quadrangle.
USGS 1:63,360 Topo Map Extent	Select a quadrangle name from the dropdown list and click Draw to navigate to the specified quadrangle.
Address Geocoding (2004 TIGER/Line)	Enter the address of the geocoding and click Draw to navigate to the location. Note: The Address Geocoding (2004)
	TIGER/Line) data is in progress of being updated. Currently it is utilizing data from 2004.

- 3. Enter the required parameters for the selected navigation option. Each option requires different information. For example, in Figure 29 we have selected the "ADF&G Game Management Units" option, which requires us to select a value from the **Unit** dropdown menu.
- 4. Click **Draw** to preview the area of interest on the map. Queries cannot be run on this preview.

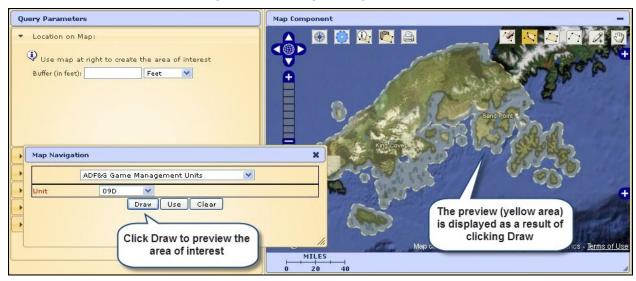


Figure 27 - Map Navigation Tool Draw

5. To be able to run queries against the selected area of interest, click **Use**. This will create a point or a polygon around the previewed area.

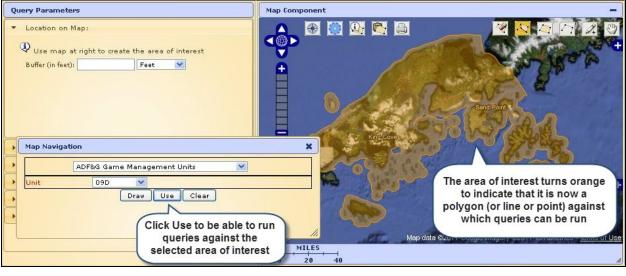


Figure 28 - Map Navigation Tool Use

6. Close the Map Navigation window, and run a query from the Query Parameters section. The area of interest selected on the map will serve as the location or point of interest required by the query.

Map Buffer

The map tools: **Draw Point**, **Draw Line**, **Draw Polygon** automatically get a buffer added around them. The buffer appears as a blue dotted line and is viewable depending on the size of the buffer and the extent of the map view. The closer the zoom level the clearer the view of the buffer. The buffer can be increased to capture features around it.

To manipulate the buffer:

1. Enter a numerical value in the field next to "Buffer (in feet):"

Note: You can also use the "mile" unit of measure from the drop down options. Use caution when executing a buffer in miles. It can return a very large result set which may slow down the performance of the report.

- 2. Press **Tab** on your keyboard so that the units of measure drop down box is highlighted in blue. Select the desired unit of measure.
- 3. Click on the **Run Query** button to view the "Result Set" from the selection.

Repositioning and Resizing the Map Component Interface

You can easily move the Map Component from its default position on the right side of the page to a different position elsewhere on the screen. You can also increase and decrease the size of the Map Component.

To reposition and resize the Map Component:

- Click the Map Component header bar and while holding down the mouse button, move the Map Component wherever desired.
- 2. Hover the mouse pointer over the Map Component's resize tab located in the bottom-right corner. The pointer will turn into a double pointed arrow which can be used to expand and contract the Map Component.
- 3. To redock the Map Component, click the minimize button in the top-right corner.

Map Views

The base map can be changed by selecting the plus signs, to the right of the Map Component interface. To minimize the screens select the minimize button. See "An Overview of Querying in Map Component" on page 26 for screenshots.

Base Layer

There are seven different base maps that can be used interchangeably on the "Map Component" screen as shown below. Select the top right plus sign to see the different base layer options. Deselecting the **Report Data** overlay checkbox removes the features from the map display but they are still selectable if a query is run. You cannot see them on the map but the data still exists.

Note: Some base maps may be limited on how far it can zoom in and when they reach their limit the base map images do not display. However, the features are still selectable and able to be queried.

Base Layer Options	Description	Data feeds provided by
Google Hybrid	A hybrid of the satellite and roadmap image, showing a transparent layer of major streets and place names on the satellite image.	Google
Google Streets	A standard roadmap image, as is normally shown on the Google Maps website	Google
Google Satellite	A satellite image.	Google

Google Physical	A physical relief image, showing terrain and vegetation.	Google
SDMI BDL	Alaska Statewide Digital Mapping Initiative (SDMI) Best Data Layer (BDL) provides the best available imagery base layer that covers the entire state of Alaska.	GINA
NOAA Charts	National Oceanic and Atmospheric Administration (NOAA) nautical charts that cover the coastal waters of Alaska.	GINA
USGS Topos	U.S. Geological Survey (USGS) topographic maps that show and name prominent natural and cultural features, with contours to show the shape and elevation of the terrain.	GINA

Overview Map

Selecting the bottom plus sign to the right of the "Map Component" interface displays the overview map. Moving the rectangle with the mouse pointer changes the area displayed on the "Map Component" screen.

To minimize the screens select the minimize button.

Using Multiple Areas of Interest in a Query

If you run a query with multiple drawn features on the map, the **Feature Selector** dialog will display to allow you to select the features you would like to use in the query.

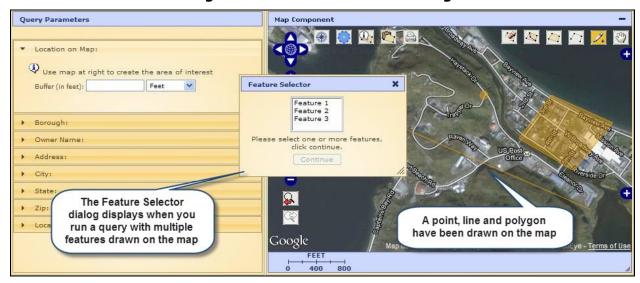


Figure 29 - Feature Selector Dialog

To use the Feature Selector dialog, select one of more features and click **Continue**. The query will run using the selected features. For example. In Figure 30 the query will be run on both the line and the po;ygon that are selected.

Query Parameters Selected features are indicated by Use map at right to create the area of interest blue shading Feature Selector Buffer (in feet): Feet Select one or more features from the list and eature 3 click Continue to Please select one or more features, click continue. continue with your query Address Continue ▶ City: State: Location Information: Map data @2011 Google Imagery @2011 DigitalGlobe, Ge 800 400

Figure 30 - Selecting Features using the Feature Selector Dialog

Note: To select multiple features, hold down the Ctrl or Shift key while clicking.

Report Display Page

The Report Display page displays the results of your query. The columns that appear on this page correspond to the fields that you selected using the **Select Field Names** function.



Figure 31 - Report Display Page

Paging Options

Rows Per Page

The **Rows Per Page** selector allows you to limit the number of rows that will display on each page of the report. To change this number, click the **Rows Per Page** dropdown and select a value.

Moving from Page to Page

If there is more than one page of results, you can step back and forth through the pages one by one using the **Next Page** and **Previous Page** buttons. You can also navigate directly to a specific page by clicking the **Go to Page** selector and choosing the page that interests you.

Select Field Names

To change the selected fields for the report:

- 1. Click the Select Fields Names button to open the Select Field Names dialog.
- 2. Use the select/remove buttons located between the two lists to move fields from one list to the other. Any selected/removed fields will be added to the end of the destination list.
- 3. Use the move buttons to the right of the selected fields list to set the display order of the fields. From top to bottom, the items in the "Selected Fields" list will display from left to right in the report results.
- 4. Select either "Select Fields" or "Select Fields and Run Query" to finish.

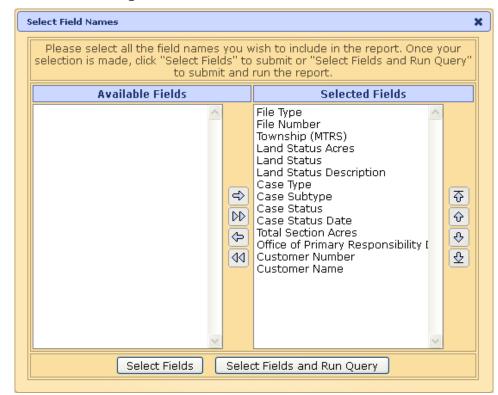


Figure 32 - Select Field Names

Icon	Name	Description
♠	Select Fields	Move items from the "Available Fields" list to the "Selected Fields" list. Buttons are for selecting chosen items or all list items respectively. Fields selected will be added to the bottom of the list.

♦	Remove Fields	Move items from the "Selected Fields" list to the "Available Fields" list. Buttons are for removing chosen items or all list items respectively.
\$ \$ \$	Order Fields	Change the order of chosen fields in the "Selected Fields" list. Buttons are for moving the chosen fields up, down, to the top, or to the bottom.

Sort Fields

To sort fields used in a query:

- 1. Click the **Sort Fields** button to open the **Sort Fields** dialog.
- 2. Select any report field that you want to change the sort order of.

Note: Only one field can be selected at a time from the "Sortable Fields" list.

3. Set the sort order of the selected field by clicking on either the ASC or DESC icons.

Note: To remove any sorting applied to a field, click the active sort button to toggle sorting on or off.

- 4. Repeat steps 2-3 for additional sorting.
- 5. Set the sort priority of the sorted report fields with the move buttons. Sorted fields are prioritized in the list from the top to bottom. The sort ordering is independent from the display order the fields.

Note: Sort priority is shown in the report results marked with its number (#) underneath the field name

6. Clicking on **Sort and Run Query** will apply any changes made to the sorting and will run the report.



Figure 33 – Sort Fields

Exporting the Report

Save to Excel

The **Save to Excel** button is used to open and save the report in a Microsoft Excel spreadsheet format. This spreadsheet can be edited as you see fit. If the search results include more than 5,000 records, an alert pop-up will appear saying that the report size needs to be smaller. However, the report will still export; it will take several minutes (maybe longer) to export. The pop-up exists to avoid performance problems.

Save to PDF

The **Save to PDF** button is used to open and save the report in a PDF format (this format may take longer than the others). If you have the appropriate Adobe software, this document can be edited as you see fit. If the search results include more than 5,000 records, an alert pop-up will appear saying that the report size needs to be smaller. However, the report will still export; it will take several minutes (maybe longer) to export. The pop-up exists to avoid performance problems.

Report Information

When you click the **Report Information** button, a new window will display information about the parameters you chose on the "Query Parameters" section. This can serve as a useful record of how the report was generated. It can also assist technical support staff in solving any data problems you may experience.

Report Information Report ID Report Name LAS Transaction Query w/ Case Summary Pulls the specific details from transactions and returns information along with case Report Description Report Date Sep 28, 2011 4:50 PM User public # of Records 18416 Report Parameters Case Type 105 Case Subtype Case Status 65 Case Status Date Office of Primary Responsibility Transaction Code Transaction Date **SOL Statement** SELECT FILE_TYPE, FILE_NUMBER, CASE_TYPE, CASE_TYPE_DESCRIPTION, SPECIAL_CODE, SPECIAL_CODE_DESC, SPECIAL_CAT_DESC, CUSTOMER_NUMBER, CUSTOMER_NAME, CASE_STATUS_CODE, CASE_STATUS_DESC, CASE_STATUS_DATE, OFFICE_PRIMARY_RESPONSIBILITY, OFF_PRIMARY_RESP_DESC, TOTAL_ACRES, MTRS ADJUDICATOR, TRANSACTION_CODE, TRANSACTION_DESCRIPTION, TRANSACTION_DATE, TRANSACTION_TIME, TEXT1, TEXT2, INITIATE_DATE FROM DBRS.V_DBRS_LAS_TRNS_W_CASE_SMRY WHERE CASE_TYPE IN ('105') AND CASE_STATUS_CODE IN ('65') ORDER BY FILE_TYPE ASC, FILE_NUMBER ASC, OFF_PRIMARY_RESP_DESC ASC

Figure 34 - Report Information

Special Links

The values in certain columns of the report results will sometimes display as hyperlinks and smart links that, when clicked, display useful information or connect you to other DNR systems.

Hyperlinks

Following are some examples of the hyperlinks:

Column	Result of Clicking a Value in the Column
• File Number	 You will be directed to the Land Administration System (LAS), which will display the case abstract that applies to that particular file number.
• MTRS	 You will be directed to the Alaska Land Records website, where you can search state and federal land records related to that township designation.
• Case Type	 A window will display a definition of that particular case type.
• Case Subtype	 A window will display a definition of that particular case subtype.
View Trail	 A window will display information about that particular trail.
• View PDF	 A window will display information about that particular trail in PDF format.

Smart Links

There are two icons that look alike. One of them is the information icon, and the other is the smart link icon, . Unlike the information icon, the smart link icon does not have a tail on the bubble around the "i". Additionally, the smart link icon opens a different application from which more information is displayed or more searches can be conducted.

Note: The smart link only appears in the "Result Set" section.

Viewing Features

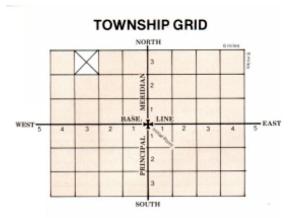
Reports that have a "Map Component" interface generate a "Result Set" that includes a column called **Show Feature**, Clicking on the **Show Feature** button will zoom the map view in and highlight the exact spot of the selected feature.

Appendix A About Townships and Sections

In land-description nomenclature, the word "township", also know as an MTR, is used both to describe a unit of land and as a guide to the location of a specific piece of land.

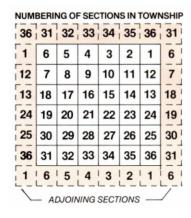
The descriptors "township" and "range" indicate the horizontal and vertical coordinates of a township unit. Townships, are north and south of the base line, ranges are east and west of the meridian line. For example, Township 3 North, Range 3 West, Fairbanks Meridian (usually written T.3N, R.3W, F.M.) will be the third township north of the initial point and in the third range west of the same point in the Fairbanks Meridian. For use in DBRS the township will be written as F003N003W.

The X on the township grid pictured here shows the location of the township described above, and would be in the identical position in any of the meridians.



A township measures six miles by six miles and therefore contains 36 square miles. Each square mile is known as a section (640 acres), with numbers from 1 to 36 to designate the location of each section in the township.

The sections are numbered 1-36 in sequence beginning at the northeast corner of the township and moving to the left across the top tier of that township; then dropping to the tier below with section 7 directly south of section 6; then moving to the right. This method is shown in the picture below.



If this township were the township F003N003W, it would be the non-colored numbers. The colored numbers surrounding the township are the sections of the adjacent townships.